Notice of Allowability	Application No.	Applicant(s)	
	10/670,398	OHASHI ET AL.	
	Examiner	Art Unit	
	Rachel Dicht	2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *9 September 2005*.

2. ☒ The allowed claim(s) is/are *1-5,7-11 and 13-26*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 3/30/2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other *See Continuation Sheet*.

Continuation of Attachment(s) 9. Other: IDS filed on: 3/17/2004 and 12/1/2003 .

DETAILED ACTION

Specification

The examiner notes that an amended specification was filed on 23 February 2004 before the Non-Final Action was issued. The examiner withdraws objections to the specification.

Allowable Subject Matter

1. The following is an examiner's statement of reasons for allowance:

The primary reason for the allowance of claims 1-5, 7-11, and 13-26 is the inclusion of the limitation of:

Claim 1:

A liquid ejecting head comprising: a card edge contact having a plurality of electrical contacts for transmission of a driving signal; a recording element substrate having a recording element for generating energy contributable to eject liquid onto a recording material in response to the driving signal; and an electrical flexible cable for electrical connection between said card edge contact and said recording element substrate, **and a projection for damming flow of the liquid deposited on a surface so as to prevent the liquid from flowing toward said card edge contact**.

Claim 8:

A liquid ejection head comprising: a card edge contact having a plurality of electrical contacts for transmission of a driving signal, a recording element substrate having a recording element for generating energy contributable to eject liquid onto a recording material in response to the driving signal; and an electrical flexible cable for electrical connection between said card edge contact and said recording element substrate, and a main body portion supporting said card edge contact and said recording element substrate, wherein said main body portion is provided with a connection surface for connection with said electrical flexible cable, **and said connection surface has a groove for stopping flow of the liquid, deposited on a surface of said liquid ejection recording head, toward said card edge contact**.

Claim 11:

A manufacturing method for manufacturing a liquid ejection recording head including a card edge contact having a plurality of electrical contacts for transmission of a driving signal; a recording element substrate having a recording element for generating energy contributable to eject liquid onto a recording material in response to the driving signal; a recording element unit supporting the recording element substrate; and a main body supporting the card edge contact and the recording element substrate, wherein the card edge contact and the recording element substrate are electrically connected by an electrical flexible

cable, said method comprising the steps of: connecting the electrical flexible cable to the recording element unit while the recording element substrate and the card edge contact are in electrical connection with each other, and mounting the recording element unit on one side of the main body; bending the electrical flexible cable so as to be along another side of the main , body which is adjacent to the one side; connecting at least a part of the electrical flexible cable to the other side of the main body; and mounting the card edge contact to the main body, with a portion of the electrical flexible cable being not connected with the main body and being bent at a predetermined angle wherein the card edge contact and the main body are provided with respective holes through which fixing means for fixing the card edge contact to the main body are provided, and the hole in the card edge contact is elongated in a direction perpendicular to a direction in which the electrical flexible cable extends from the recording element substrate to the card edge contact.

Claim 14:

A manufacturing method for manufacturing a liquid ejection recording head including a card edge contact having a plurality of electrical contacts for transmission of a driving signal; a recording element substrate having a recording element for generating energy contributable to eject liquid onto a recording material in response to the driving signal; a recording element unit supporting the recording element substrate: and a main body supporting the card edge contact

and the recording element substrate, wherein the card edge contact and the recording element substrate are electrically connected by an electrical flexible cable, said method comprising the steps of: connecting the electrical flexible cable to the recording element unit while the recording element substrate and the card edge contact are in electrical connection with each other, and mounting the recording element unit on one side of the main body; bending the electrical flexible cable so as to be along another side of the main body which is adjacent to the one side; connecting at least a part of the electrical flexible cable to the other side of the main body; mounting the card edge contact to the main body, with a portion of the electrical flexible cable being not connected with the main body and being bent at a predetermined angle; **and providing a projection for damming flow of the liquid deposited on a surface so as to prevent the liquid from flowing toward the card edge contact**.

Claim 15:

A manufacturing method for manufacturing a liquid ejection recording head including a card edge contact having a plurality of electrical contacts for transmission of a driving signal; a recording element substrate having a recording element for generating energy contributable to eject liquid onto a recording material in response to the driving signal; a recording element unit supporting the recording element substrate; and a main body supporting the card edge contact and the recording element substrate, wherein the card edge contact and the

recording element substrate are electrically connected by an electrical flexible cable, said method comprising the steps of: connecting the electrical flexible cable to the recording element unit while the recording element substrate and the card edge contact are in electrical connection with each other, and mounting the recording element unit on one side of the main body; bending the electrical flexible cable so as to be along another side of the main body which is adjacent to the one side; connecting at least a part of the electrical flexible cable to the other side of the main body; mounting the card edge contact to the main body, with a portion of the electrical flexible cable being not connected with the main body and being bent at a predetermined angle; and providing a groove on the other side of the main body, to which at least a part of the electrical flexible cable is connected, **wherein the groove is for stopping flow of the liquid, deposited on a surface of the liquid ejection recording head, toward the card edge contact**.

It is these limitations/steps found in each of the claims, as they are claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachel Dicht whose telephone number is 571-272-8544. The examiner can normally be reached on 7:00 am - 3:30 pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RSD
October 12, 2005

SHIH-WEN HSIEH
PRIMARY EXAMINER